

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P192192

Luminaire Tested: **GLEON-AF-04-LED-E1-T2R-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192192
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-T2R-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16482 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

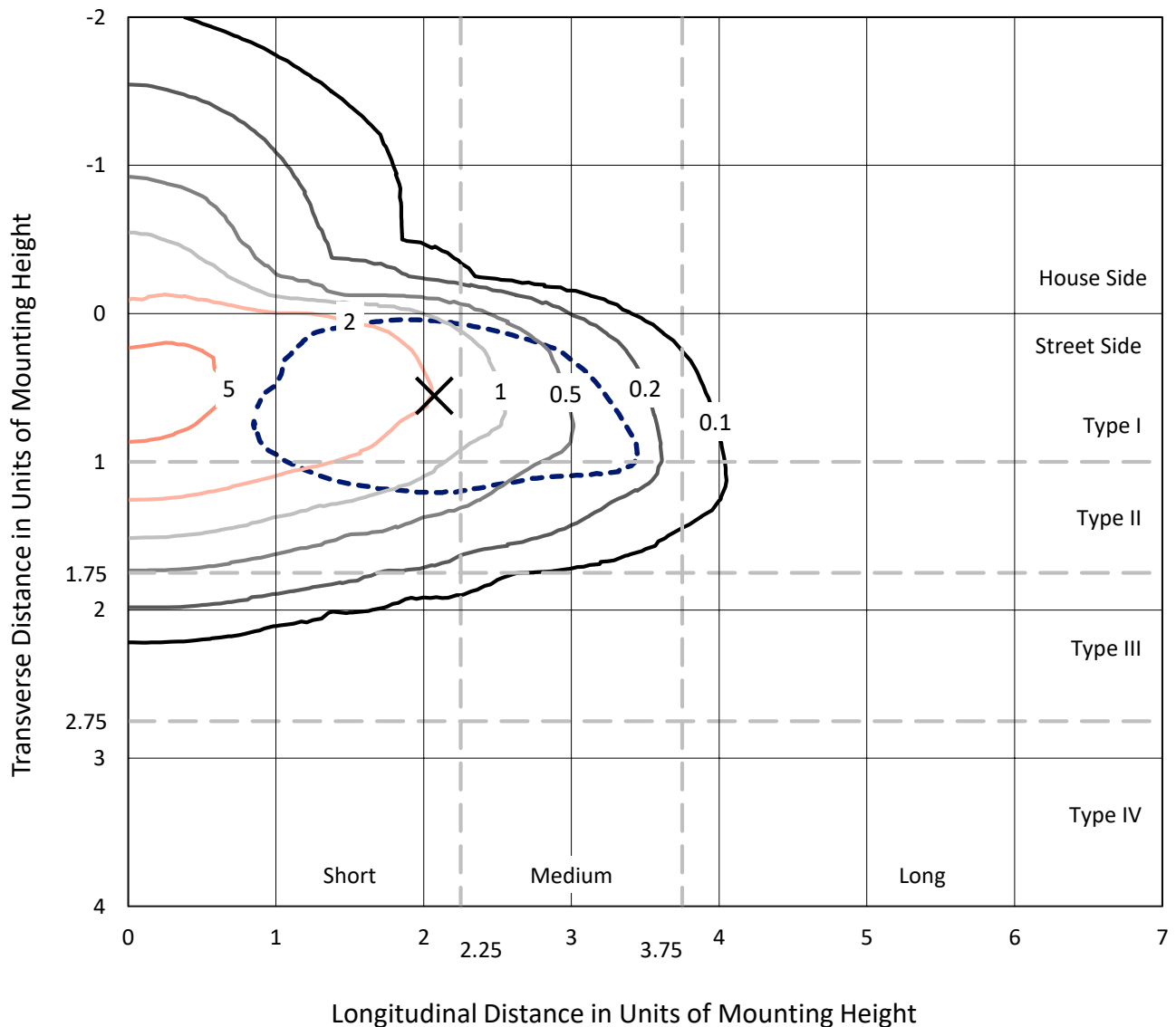


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Iso-Footcandle Lines of Horizontal Illumination

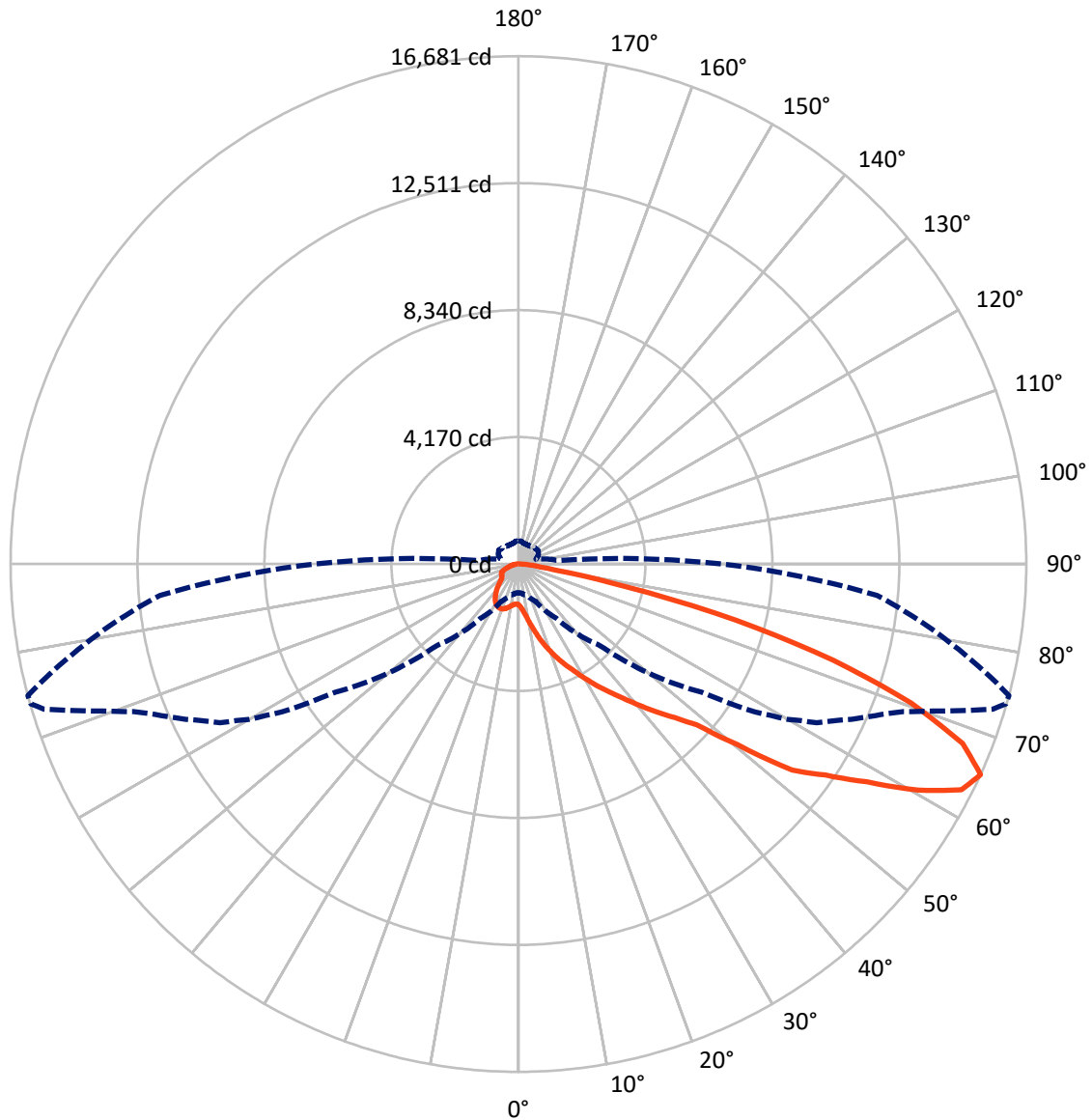
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2541.1	0.0	2541.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	13940.9	0.0	13940.9
	% Fixture	84.6	0.0	84.6
Total	Lumens	16482.0	0.0	16482.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	1.0
10°-20°	646.9	3.9
20°-30°	1327.2	8.1
30°-40°	2233.0	13.5
40°-50°	3085.3	18.7
50°-60°	3851.4	23.4
60°-70°	3465.9	21.0
70°-80°	1452.9	8.8
80°-90°	253.8	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	16482.0	100.0
0°-180°	16482.0	100.0



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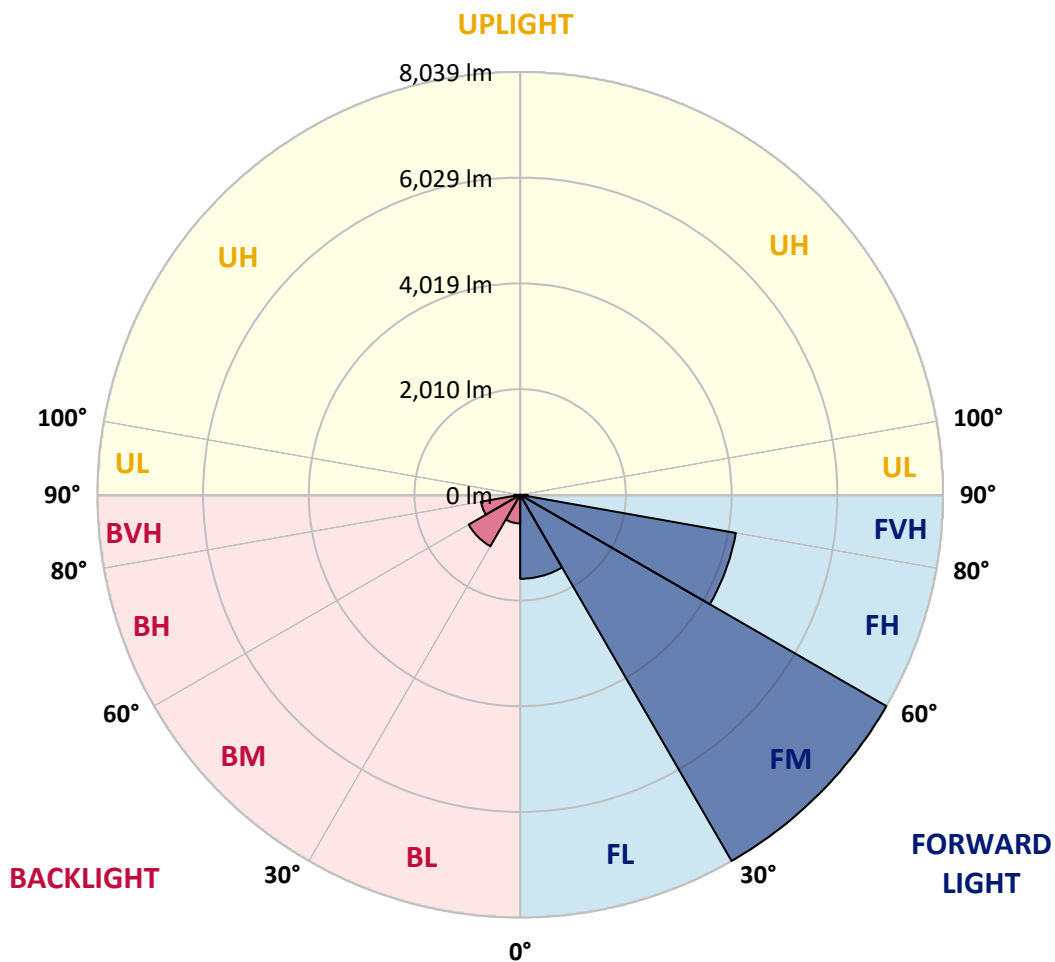
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1596.2	9.7			
FM (30°-60°)	8038.7	48.8			
FH (60°-80°)	4163.3	25.3			G2/5000
FVH (80°-90°)	142.7	0.9			G2/225
BL (0°-30°)	543.4	3.3	B2/1000		
BM (30°-60°)	1131.1	6.9	B2/2500		
BH (60°-80°)	755.4	4.6	B2/1000		G2/1000
BVH (80°-90°)	111.2	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5
2.5°	1700.7	1682.0	1686.6	1655.4	1617.2	1567.3	1511.9	1511.1	1511.9	1506.4	1486.1
5°	2358.3	2335.7	2327.1	2256.9	2153.9	2007.3	1848.1	1831.0	1823.9	1806.0	1764.6
7.5°	2838.1	2825.6	2812.4	2759.3	2665.7	2501.9	2288.1	2251.4	2216.3	2207.8	2161.0
10°	3147.8	3144.7	3116.6	3102.6	3044.1	2902.1	2693.8	2658.7	2620.4	2607.2	2558.0
12.5°	3392.8	3392.0	3378.7	3382.6	3331.9	3228.9	3049.5	3017.5	2989.4	2948.9	2913.8
15°	3562.1	3562.8	3582.3	3604.2	3596.4	3527.0	3358.4	3344.4	3320.2	3292.1	3250.8
17.5°	3700.9	3704.8	3725.1	3764.9	3807.8	3802.3	3668.9	3657.2	3636.2	3597.9	3576.1
20°	4014.5	4029.4	3990.3	3990.3	3995.0	4016.1	3952.1	3942.8	3913.1	3892.8	3875.7
22.5°	4544.2	4561.4	4473.2	4383.5	4295.4	4231.4	4167.4	4179.1	4158.9	4144.8	4134.7
25°	5232.3	5245.6	5102.8	4951.5	4772.0	4538.0	4379.6	4372.6	4361.7	4353.1	4348.4
27.5°	5879.8	5885.3	5750.3	5528.8	5320.5	4984.2	4594.9	4586.4	4573.1	4556.7	4542.7
30°	6433.7	6432.1	6293.3	6081.9	5858.8	5486.6	4921.8	4895.3	4856.3	4811.8	4777.5
32.5°	6913.5	6911.1	6759.0	6539.8	6305.8	5984.4	5369.6	5315.0	5254.2	5167.6	5115.3
35°	7291.1	7289.5	7146.0	6917.4	6649.0	6453.2	5882.9	5815.8	5738.6	5622.4	5542.0
37.5°	7433.8	7433.8	7353.5	7197.5	6960.3	6826.1	6453.2	6372.1	6289.4	6157.5	6067.0
40°	7350.4	7351.9	7369.1	7340.2	7224.8	7121.8	6985.3	6936.9	6865.9	6747.3	6652.9
42.5°	7070.3	7078.9	7192.8	7332.4	7390.1	7373.8	7457.2	7435.4	7385.5	7294.2	7219.3
45°	6715.3	6741.9	6866.7	7130.4	7436.2	7591.4	7852.8	7855.1	7845.7	7796.6	7738.9
47.5°	6227.8	6265.2	6429.8	6786.3	7328.5	7802.8	8254.5	8275.6	8295.1	8263.1	8236.6
50°	5580.2	5624.7	5871.2	6344.0	7109.3	8022.0	9013.6	9108.8	9197.7	9186.8	9204.7
52.5°	4886.7	4939.0	5240.9	5767.5	6732.5	8072.8	9498.8	9654.1	9809.3	9936.5	10071.4
55°	4261.1	4233.0	4534.9	5089.5	6113.1	7844.2	9934.9	10122.1	10295.3	10451.4	10612.1
57.5°	3413.1	3459.1	3761.8	4310.2	5293.2	7199.0	10235.3	10509.1	10757.9	11016.2	11244.0
60°	2494.8	2540.9	2869.3	3426.3	4403.0	6220.7	10005.9	10420.9	10819.6	11215.1	11524.0
62.5°	1506.4	1540.8	1830.2	2360.7	3395.1	5060.7	8983.9	9528.5	10115.1	10587.9	11061.4
65°	937.7	957.2	1064.1	1355.9	2180.5	3778.2	7340.2	7933.9	8565.8	9165.7	9658.0
67.5°	767.6	774.7	794.2	856.6	1197.5	2463.6	5463.2	5989.0	6559.3	7139.7	7687.4
70°	690.4	685.7	685.7	689.6	767.6	1324.7	3576.9	3919.4	4394.5	4899.2	5400.0
72.5°	623.3	618.6	610.1	598.4	626.4	808.2	1848.9	2107.1	2449.6	2898.2	3377.9
75°	560.1	553.9	543.7	528.9	548.4	610.1	887.8	996.2	1163.2	1401.9	1669.5
77.5°	494.6	486.8	477.4	466.5	491.5	474.3	520.3	559.4	623.3	699.8	800.4
80°	420.5	413.5	410.3	404.9	434.5	361.2	367.4	391.6	429.1	470.4	517.2
82.5°	329.2	329.2	341.7	344.0	376.8	259.8	274.6	295.7	315.2	337.0	358.9
85°	216.9	218.4	260.6	276.9	297.2	174.7	206.0	213.0	228.6	241.1	250.4
87.5°	67.9	73.3	159.1	176.3	170.8	99.1	126.4	129.5	140.4	149.0	156.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5
2.5°	1486.1	1476.8	1468.2	1467.4	1461.2	1452.6	1455.7	1442.5	1443.2	1436.2	1428.4
5°	1747.5	1741.2	1710.0	1701.5	1678.1	1663.2	1660.9	1629.7	1625.8	1607.8	1588.3
7.5°	2123.5	2103.2	2059.5	2038.5	1998.7	1969.0	1955.0	1913.7	1893.4	1846.6	1825.5
10°	2517.5	2491.7	2437.9	2408.3	2370.0	2322.4	2296.7	2236.6	2213.2	2170.3	2118.8
12.5°	2882.6	2856.8	2801.4	2778.8	2728.1	2677.4	2649.3	2581.4	2551.0	2482.4	2441.8
15°	3220.4	3194.6	3146.3	3122.8	3072.1	3030.8	2993.3	2926.3	2890.4	2826.4	2773.4
17.5°	3548.0	3520.7	3478.6	3457.5	3408.4	3366.2	3325.7	3262.5	3225.8	3161.9	3114.3
20°	3852.3	3832.0	3801.6	3773.5	3724.3	3686.1	3637.7	3583.1	3530.1	3483.3	3438.0
22.5°	4117.5	4109.7	4076.9	4064.5	4022.3	3989.6	3947.4	3893.6	3855.4	3796.1	3754.0
25°	4346.1	4343.7	4328.1	4324.2	4294.6	4263.4	4254.0	4209.6	4174.5	4122.2	4078.5
27.5°	4542.7	4545.0	4541.1	4552.0	4544.2	4530.2	4531.0	4516.2	4495.9	4452.2	4414.0
30°	4761.1	4748.6	4755.7	4771.3	4775.9	4777.5	4803.2	4811.8	4810.3	4781.4	4762.7
32.5°	5070.0	5040.4	5013.1	5010.8	5026.4	5032.6	5076.3	5098.9	5118.4	5125.4	5128.6
35°	5464.0	5404.7	5347.8	5317.3	5290.8	5297.8	5329.0	5365.7	5408.6	5438.3	5473.4
37.5°	5960.2	5887.6	5787.0	5715.2	5697.3	5658.3	5678.5	5707.4	5749.5	5795.6	5856.4
40°	6561.6	6451.6	6338.5	6243.4	6191.9	6120.1	6119.3	6113.9	6139.6	6182.5	6268.3
42.5°	7140.5	7043.0	6922.8	6823.0	6755.9	6659.9	6640.4	6589.7	6601.4	6638.9	6722.4
45°	7682.7	7602.3	7529.0	7413.5	7356.6	7252.8	7220.1	7160.0	7126.5	7143.6	7227.1
47.5°	8207.7	8156.2	8079.8	8004.9	7961.2	7868.4	7826.2	7783.3	7740.4	7738.9	7826.2
50°	9231.2	9203.9	9113.4	9035.4	9056.5	8942.6	8949.6	8834.2	8886.4	8892.7	9076.0
52.5°	10193.1	10288.3	10355.4	10437.3	10490.4	10500.5	10535.6	10587.9	10651.1	10775.9	10946.0
55°	10743.9	10863.3	10932.7	10995.1	11098.1	11119.9	11178.4	11247.9	11303.3	11443.7	11588.0
57.5°	11398.4	11620.0	11727.6	11826.7	11965.6	12018.6	12116.1	12191.8	12263.6	12429.8	12604.5
60°	11801.8	12071.7	12290.9	12447.7	12621.7	12746.5	12893.9	13012.5	13181.0	13380.0	13640.5
62.5°	11481.1	11877.4	12168.4	12437.6	12673.9	12912.7	13124.1	13345.6	13601.5	13902.6	14306.7
65°	10204.1	10607.4	11105.9	11385.2	11698.0	12066.2	12387.6	12746.5	13095.2	13533.6	14131.2
67.5°	8214.7	8683.6	9243.7	9525.3	9885.0	10296.1	10656.5	11095.0	11502.2	12033.5	12772.2
70°	5921.2	6527.3	6998.5	7292.6	7712.3	8135.9	8483.9	8994.1	9331.1	9875.6	10639.4
72.5°	3749.3	4227.5	4804.8	5175.4	5548.3	5977.3	6333.1	6773.1	7087.5	7583.6	8275.6
75°	2015.8	2368.5	2875.5	3227.4	3626.8	3993.5	4410.1	4704.9	4937.4	5329.8	5891.5
77.5°	944.7	1159.3	1415.9	1686.6	1957.3	2239.7	2514.3	2753.1	2852.9	3077.6	3409.2
80°	573.4	642.8	717.7	801.2	914.3	1005.6	1126.5	1213.9	1220.1	1291.1	1392.5
82.5°	383.0	408.8	431.4	452.5	481.3	504.0	529.7	560.1	572.6	589.0	621.8
85°	261.3	273.8	278.5	291.8	288.6	296.4	306.6	316.7	322.2	321.4	336.2
87.5°	160.7	166.9	170.1	173.2	170.8	167.7	172.4	177.9	179.4	174.7	176.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5
2.5°	1430.0	1423.0	1415.9	1411.2	1409.7	1368.3	1350.4	1338.7	1313.7	1293.5	1277.1
5°	1577.4	1562.6	1550.9	1536.8	1529.0	1424.5	1386.3	1359.8	1316.1	1290.3	1266.9
7.5°	1814.6	1773.2	1749.0	1721.7	1698.3	1509.5	1446.4	1405.0	1344.2	1309.8	1283.3
10°	2083.7	2040.8	2002.6	1960.5	1923.8	1622.7	1530.6	1466.6	1386.3	1341.8	1306.7
12.5°	2384.1	2341.9	2293.6	2239.7	2192.9	1766.2	1638.3	1547.0	1437.0	1377.7	1328.6
15°	2739.0	2664.9	2606.4	2544.0	2489.4	1937.8	1763.9	1637.5	1490.8	1410.5	1344.9
17.5°	3069.0	2991.0	2911.4	2856.8	2793.6	2130.5	1890.2	1729.5	1535.3	1431.5	1348.1
20°	3391.2	3306.2	3237.5	3164.2	3097.9	2330.2	2025.2	1810.7	1564.2	1432.3	1328.6
22.5°	3675.2	3622.1	3545.7	3466.1	3399.0	2530.0	2151.6	1879.3	1575.1	1414.4	1294.2
25°	3998.2	3942.0	3848.4	3781.3	3706.4	2733.6	2275.6	1932.4	1568.8	1380.8	1241.2
27.5°	4343.0	4280.6	4184.6	4114.4	4023.9	2945.0	2389.5	1970.6	1545.4	1326.2	1170.2
30°	4702.6	4645.7	4551.3	4480.3	4389.0	3168.9	2516.7	1996.3	1498.6	1250.5	1087.5
32.5°	5088.8	5041.2	4947.6	4873.5	4775.9	3411.5	2635.3	2004.1	1427.6	1160.8	1000.1
35°	5455.4	5422.7	5343.9	5274.4	5173.0	3640.9	2760.9	2000.2	1343.4	1062.5	920.5
37.5°	5868.1	5848.6	5809.6	5721.5	5597.4	3952.1	2911.4	1983.9	1240.4	965.0	859.7
40°	6308.1	6309.7	6267.5	6207.5	6092.0	4329.7	3090.9	1951.9	1128.1	879.2	804.3
42.5°	6773.8	6798.0	6777.7	6734.8	6624.1	4710.4	3305.4	1912.9	1018.8	795.7	749.7
45°	7307.4	7337.1	7368.3	7305.1	7197.5	5212.8	3587.8	1862.2	901.0	726.3	712.3
47.5°	7923.0	7969.8	7997.9	7998.6	7891.0	5835.3	4046.5	1831.7	796.5	679.5	694.3
50°	9221.9	9236.7	9303.0	9418.5	9335.8	7276.2	4847.7	1813.0	725.5	650.6	681.1
52.5°	11093.4	11256.5	11371.1	11363.3	11251.0	8191.3	5289.3	1716.3	683.4	639.7	674.8
55°	11855.6	12059.2	12271.4	12327.6	12240.2	8972.2	5706.6	1619.5	663.1	647.5	677.2
57.5°	12871.3	13214.6	13505.6	13628.0	13501.7	9971.6	6255.8	1568.8	656.9	668.6	692.0
60°	14057.9	14482.3	14864.5	15084.5	15084.5	11119.9	6825.3	1547.8	648.3	699.8	716.9
62.5°	14820.1	15443.4	16020.7	16342.9	16333.5	11919.6	7078.1	1476.0	628.8	721.6	751.3
65°	14823.2	15564.3	16300.0	16661.9	16680.7	11821.3	6660.7	1303.6	592.9	724.7	785.6
67.5°	13587.5	14377.7	15235.1	15640.0	15733.6	10882.0	5765.9	1071.9	534.4	693.5	798.1
70°	11475.7	12247.2	13122.5	13520.4	13686.5	9276.5	4644.1	826.2	459.5	624.9	772.3
72.5°	9040.9	9797.6	10406.9	10697.9	10827.4	7090.6	3381.8	624.1	376.8	526.6	702.9
75°	6400.9	6968.9	7292.6	7357.4	7377.7	4274.3	2054.9	464.2	310.5	409.6	593.7
77.5°	3612.8	3856.2	3829.6	3858.5	3618.2	1650.0	894.8	332.3	255.9	311.3	460.3
80°	1410.5	1454.2	1366.0	1338.7	1227.9	614.0	394.7	231.7	204.4	235.6	322.2
82.5°	621.8	642.0	623.3	628.0	600.7	316.7	236.4	167.7	156.0	172.4	213.8
85°	342.5	348.7	347.2	357.3	342.5	126.4	112.3	103.0	109.2	117.0	137.3
87.5°	166.9	168.5	163.0	171.6	166.2	64.0	55.4	58.5	64.0	65.5	65.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	1339.5	1339.5	1339.5	1339.5	1339.5	1339.5
2.5°	1265.4	1259.1	1259.9	1258.3	1255.2	1255.2
5°	1254.4	1248.2	1248.2	1246.6	1242.7	1243.5
7.5°	1265.4	1255.2	1251.3	1245.9	1240.4	1240.4
10°	1277.8	1259.9	1249.0	1239.6	1232.6	1232.6
12.5°	1287.2	1259.1	1241.2	1228.7	1221.7	1221.7
15°	1290.3	1253.7	1228.7	1213.9	1207.6	1206.9
17.5°	1280.2	1232.6	1202.2	1185.0	1177.2	1174.9
20°	1249.0	1194.4	1157.7	1138.2	1127.3	1123.4
22.5°	1202.2	1139.8	1096.9	1076.6	1062.5	1060.2
25°	1136.6	1069.6	1027.4	1007.9	1000.1	997.8
27.5°	1060.2	997.8	961.9	949.4	942.4	941.6
30°	987.6	934.6	908.1	898.7	890.1	888.6
32.5°	919.8	886.2	876.1	862.8	842.5	840.2
35°	871.4	868.3	861.3	831.6	806.7	799.6
37.5°	841.8	870.6	834.7	776.2	758.3	756.7
40°	824.6	846.4	784.8	764.5	766.1	764.5
42.5°	785.6	808.2	786.4	777.0	783.2	784.8
45°	746.6	771.5	798.1	791.8	806.7	806.7
47.5°	724.7	762.2	797.3	797.3	819.1	826.9
50°	699.8	754.4	784.8	795.7	812.9	806.7
52.5°	698.2	741.1	766.9	786.4	794.2	787.1
55°	700.6	730.2	748.9	770.8	780.1	780.9
57.5°	703.7	724.0	736.4	746.6	774.7	774.7
60°	711.5	718.5	725.5	731.0	767.6	768.4
62.5°	724.0	713.0	711.5	716.9	763.7	760.6
65°	743.5	705.2	693.5	699.0	759.8	750.5
67.5°	770.0	693.5	670.9	674.8	756.7	736.4
70°	794.2	674.8	642.8	638.9	727.1	691.2
72.5°	796.5	653.0	603.8	592.1	631.9	597.6
75°	757.5	638.1	560.9	526.6	521.9	517.2
77.5°	682.6	629.6	511.0	457.2	447.8	450.9
80°	571.1	597.6	450.9	386.9	437.7	432.2
82.5°	426.7	527.4	383.0	342.5	341.7	301.9
85°	237.2	411.1	312.1	256.7	178.6	173.2
87.5°	66.3	228.6	218.4	145.1	99.1	103.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)